

What is claimed is:

1.

A water valve for introducing water of different temperatures to a washing appliance, comprising:
a valve body having a hot water inlet and a cold water inlet adapted to be connected to separate sources of hot and cold water respectively;
said valve body having an outlet;
said valve body having a hot water valve, a cold water valve, and a low cold water valve
said hot water valve being movable from an open position for delivering hot water from said hot water inlet to said outlet to a closed position for preventing delivery of hot water from said hot water inlet to said outlet;
said cold water valve being movable from an open position for delivering cold water from said cold water inlet to said outlet at a first rate to a closed position preventing delivery of cold water from said cold water inlet to said outlet;
said low cold water valve being movable from an open position for delivering cold water from said cold water inlet to said outlet at a second rate less than said first rate to a closed position preventing delivery of cold water from said cold water inlet to said outlet;
a hot prime mover, a cold prime mover, and a low cold prime mover connected to said hot, cold, and low cold water valves respectively for independently moving said hot, cold, and low cold water valves between their respective open and closed positions;
a controller for actuating said hot, cold, and low cold prime movers independently of one another to selectively move said hot, cold, and low cold valves to at least the following conditions:
a. said hot and low cold valves being in said open positions and said cold valve being in said closed position to cause a first temperature of water to exit from said outlet;

- b. said hot, cold and low cold valves all being in said open position to cause a second temperature of water lower than said first temperature to exit from said outlet;
- c. said cold and low cold valves being in said open positions and said hot valve being in said closed position to cause a third temperature of water lower than said first and second temperatures to exit from said outlet.

2.

A water valve according to claim 1 wherein said hot prime mover, said cold prime mover, and said low cold prime mover comprise solenoids.

3.

A water valve according to claim 1 wherein said first temperature is between 115 and 120 degrees F, said second temperature is between 75 and 82.5 degrees F, and said third temperature is approximately 60 degrees F.

4.

A water valve according to claim 3 wherein said hot valve, said cold valve, and said low cold valve have flow rates in the following ratios: 1.0 units for said hot valve, 2.08 to 3.64 units for said cold valve and .25 to .36 units for said low cold valve.

5.

A device for delivering water of different temperatures to a washing appliance, said device comprising:
a valve assembly comprising a hot water inlet, a cold water inlet, a water outlet, a hot water valve between said hot water inlet and said water outlet, a first cold water valve between said cold water inlet and said water outlet, and a second cold water valve between said cold water inlet and said water outlet;

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said hot water valve being movable from a closed position preventing the passage of hot water from said hot water inlet to said water outlet to an open position permitting the passage of hot water from said hot water inlet to said water outlet at a first flow rate;

said first cold water valve being movable from a closed position preventing passage of cold water from said cold water inlet to said water outlet to an open position permitting cold water to flow from said cold water inlet to said water outlet at a second flow rate;

said second cold water valve being movable from a closed position preventing passage of cold water from said cold water inlet to said water outlet to an open position permitting cold water to flow from said cold water inlet to said water outlet at a third flow rate less than said second flow rate;

a control system connected to said hot water valve, said first cold water valve, and said second cold water valve for causing the following conditions:

- a. a hot water condition wherein said hot water valve and said first cold water valve are in said open positions and said second cold water valve is in said closed position;
- b. a warm water condition wherein all of said hot water valve, said first cold water valve, and said second cold water valve are in said open positions;
- c. a cold water condition wherein said hot water valve is in said closed position and one or both of said first and second cold water valves are in said open position.

6.

A device according to claim 5 and further comprising a washing tub connected to said water outlet for receiving water therefrom.

7.

A device according to claim 6 wherein said washing tub is part of a clothes washing machine.

8.

A method for introducing water of different temperatures to a washing appliance comprising:
taking a valve assembly having a hot water inlet, a cold water inlet, and a water outlet;
introducing a source of hot water to a hot water inlet of said valve assembly;
introducing a source of cold water to said cold water inlet of said valve assembly;
moving said valve assembly to a first position that causes said hot water to be delivered at a first flow rate from said hot water inlet to said water outlet and causes said cold water to be delivered from said cold water inlet to said water outlet at a second flow rate whereby said water at said outlet has a first temperature;
moving said valve assembly to a second position that causes said hot water to be delivered at said first flow rate from said hot water inlet to said outlet and causes said cold water to be delivered from said cold water inlet to said outlet at a third flow rate greater than said second flow rate whereby said water at said outlet has a second temperature cooler than said first temperature;
moving said valve to a third position that causes said hot water to be prevented from moving to said outlet and causes only said cold water to be delivered to said outlet at a third temperature cooler than said first and second temperatures.

9.

A method according to claim 8 wherein said valve assembly includes a hot water valve between said hot water inlet and said water outlet, a cold water valve between said cold water inlet and said water outlet, and a low cold water valve between said cold water inlet and said water outlet,

said method comprising achieving said first temperature by opening said hot water valve and said cold water valve and closing said low cold water valve; achieving said second temperature by opening all of said hot water valve, said cold water valve, and said low cold water valve, and achieving said third temperature by closing said hot water valve and opening both of said cold water valve and said low cold water valve.